

Amendments to the Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of the Claims:

1. (Currently Amended) A computer-implemented method for selectively loading some but not all components of a class file into a virtual machine that can execute virtual machine instructions, the class file including an attributes section and a plurality of components including virtual machine instructions that can be executed by said virtual machine, said method comprising:

checking a load-attribute in the attributes section of the class file to identify one or more selected components of said class file for loading into said virtual machine, wherein said one or more selected components have been identified in the load-attribute of the attributes section of the class file for loading into said virtual machine;

loading said one or more selected components of said class file into said virtual machine; ~~and~~

not loading one or more other components of said class file into said virtual machine that are not identified for loading in the attributes section of the class file, whereby components of the class file may be selectively loaded into the virtual machine by reference to the attributes section of the class file; and

wherein said load-attribute includes an attribute table in said class file, and wherein said attribute table includes one or more offsets of the one or more selected components of said class file.

2. (Canceled)

3. (Currently Amended) A computer-implemented method as recited in claim 1, wherein said method further comprises:

marking one or more components of said class for loading into said virtual machine.

4. (Currently Amended) A computer-implemented method of selectively loading a class file into a virtual machine, said method comprising:

determining whether one or more components of said class file have been marked in said class file for loading into said virtual machine, wherein said marking is done by defining a load-attribute in said class file that indicates that one or more components of said class file have been selected for loading into said virtual machine, wherein said load-attribute includes an attribute table in said class file, and wherein said attribute table includes one or more offsets of the one or more selected components of said class file, and wherein said determining operates to determine whether one or more components of said class have been marked to be loaded into said virtual machine based on said load-attribute.

loading said one or more components of said class file into said virtual machine when said determining determines that said one or more components of said class file have been marked in said class file for loading into said virtual machine; and

not loading one or more other components of said class when said determining determines that said other one or more components of said class have not been marked to be loaded into said virtual machine.

5-6. (Canceled)

7. (Currently Amended) A computer-implemented method of selectively loading a class file into a virtual machine, said method comprising:

determining whether one or more components of said class file have been marked in said class file for loading into said virtual machine, wherein said marking is done by defining a load-attribute in said class file that indicates that one or more components of said class file have been selected for loading into said virtual machine, and wherein said determining operates to determine whether one or more components of said class have been marked to be loaded into said virtual machine based on said load-attribute;

loading said one or more components of said class file into said virtual machine when said determining determines that said one or more components of said class file have been marked in said class file for loading into said virtual machine;

not loading one or more other components of said class when said determining determines that said other one or more components of said class have not been marked to be loaded into said virtual machine; and

wherein said load-attribute in said class file is implemented as an attribute table which includes one or more offsets of one or more components of said class file wherein said one or more offsets can be used to determine the location of said one or more components in said class file, thereby allowing said one or more components to be loaded into said virtual machine based on said one or more offsets.

8. (Currently Amended) A computer-implemented method as recited in claim 7, wherein said determining whether one or more components of said class have been marked to be loaded into said virtual machine comprises:

initiating a first sequential read of said class file; and

determining whether an attribute table has been found for said class file.

9. (Currently Amended) A computer-implemented method as recited in claim 8, wherein said method further comprises:

initiating a second sequential read of said class file;

determining, during said second sequential read, whether a component of said class file has been encountered;

and determining whether of said class file a component has a corresponding entry in said attribute table of said class file when said component has been encountered.

10. (Currently Amended) A computer readable medium for storing a class file suitable for loading into a virtual machine, said class file being associated with an object-oriented class, and said virtual machine operating in an object oriented computing system, said class file comprising:

a plurality of components; and

an attribute portion that includes a load-attribute section that includes information identifying one or more of the components of said class for selective loading into the virtual machine, wherein a class loader associated with the virtual machine may reference the load-attribute portion of the class file to identify one or more selected components to be loaded into the virtual machine without loading other components of the class file into the virtual machine, whereby some but not all of the components of the class file may be loaded into the virtual machine with the components that are

selected for loading into the virtual machine being identified by reference to the load-attribute portion of the class file; and

wherein said load-attribute section includes an attribute table in said class file, and wherein said attribute table includes offsets of the one or more components of said class file that have been selected for loading into the virtual machine.

11-12. (Canceled)

13. (Currently Amended) A computer readable media including computer readable code for representing a class file suitable for loading into a virtual machine, said class file being associated with an object-oriented class, and said virtual machine operating in an object-oriented computing system[[,]] :

wherein said computer readable code representing said class file comprises computer readable code representing a load-attribute portion of said class file, and ;

wherein said attribute portion represents information about one or more components of said class that have been marked to be loaded into said virtual machine; and

wherein said load-attribute portion represents an attribute table, and wherein said attribute table includes one or more offsets of the one or more selected components of said class file.

14-15. (Canceled)

16. (Currently Amended) A computer-implemented method of loading a class file into a virtual machine, said class file being associated with an object-oriented class, and said virtual machine operating in an object-oriented computing system, said method comprising:

providing a load-attribute for said class file, wherein said providing of said load-attribute operates to provide an attribute table for said class file; wherein said attribute table includes one or more offsets of one or more components, thereby associating the one or more components of said class file with said load-attribute to indicate that said one or more components of said class file are to be loaded; and

loading only said one or more components of said class file into said virtual machine and not loading one more other components of said class file which have not been associated with said load-attribute.

17-18. (Canceled)

19. (Currently Amended) A computer-implemented method as recited in claim 16, wherein said method further comprises:

determining whether at least one component of said class file has been associated with said load-attribute.

20. (Currently Amended) A computer-implemented method as recited in claim 16, wherein said determining operates to search said attribute table for an offset associated with said at least one component of said class file.

21. (Currently Amended) A computer-implemented method as recited in claim 16, wherein said determining comprises:

initiating a first sequential read of said class file to determine whether said class file has an attribute table;

reading said attribute table when said class file has an attribute table;

initiating a second read of said class file; and

determining whether at least one component of said class file has been associated with said load attribution.

22. (Currently Amended) A computer-implemented method for selectively loading components of a class file into a virtual machine, wherein said class file includes a plurality of components including Bytecodes which can be loaded into and executed by said virtual machine, said method comprising:

determining whether said class file has a load-attribute, wherein said load-attribute has been defined as an attribute table for said class file, wherein said load-attribute includes an attribute table and includes including a list of one or more selected components of said class file which has been selected for loading, and wherein said attribute table includes one or more offsets of the one or more selected components;

reading said load-attribute when said determining determines that said class file has a load-attribute; and

loading into said virtual machine said one or more selected components of said class file after said reading of said load-attribute, wherein the nature of loading of said plurality of components of the class file is dictated at least in part by said reading of said load-attribute.

23. (Currently Amended) A computer-implemented method as recited in claim 22, wherein said one or more selected components of said class file are one or more methods of said class file.

24. (Currently Amended) A computer-implemented method as recited in claim 23, wherein said one or more selected components are not native methods.

25. (Currently Amended) A computer-implemented method as recited in claim 22, wherein said method further comprises:

not loading into said virtual machine one or more components of said class file which have not been listed in said load-attribute.

26. (Currently Amended) A computer-implemented method as recited in claim 25, wherein said components of the class file include a plurality of Java-based (non-native) components including methods, constant pools, and fields, and wherein at least one of said plurality of Java-based (non-native) components which have not been listed in said load-attribute is not loaded into said virtual machine.